

AMENDMENTS TO THE CLAIMS

1-14 (cancelled)

15. (new) A pressure-driven process for the separation of liquid feeds through a membrane, in which disturbance of the pressure-driven separation is decreased or prevented by a separation membrane comprising an elastomer in which a filler is dispersed in such a way that the filler/matrix interactions limit swelling of the membrane.

16. (new) The pressure-driven separation process of claim 15, wherein two or more components are separated over a membrane by means of a pressure gradient driven by a pressure generated at the feed site.

17. (new) The pressure-driven separation process of claim 15, wherein the filler acts as a cross-linker for the elastomer.

18. (new) The pressure-driven separation process of claim 15, wherein the filler is a molecular sieve or porous material with nanometer dimension windows, channels or cavity architectures.

19. (new) The pressure-driven separation process of claim 15, wherein the filler is silica, alumina, titania or a carbon molecular sieve.

20. (new) The pressure-driven separation process of claim 15, wherein the filler is a molecular sieve or porous material having pores with a median diameter in the range 0.3–10 nm.

21. (new) The pressure-driven separation process of claim 15, wherein said elastomeric membrane contains a filler that results in a swelling reduction of the elastomeric membrane of at least 3 %.

22. (new) The pressure-driven separation process of claim 15, wherein said swelling reduction results in an increase of the rejection of the elastomeric membrane for solutes of at least 3 %.

23. (new) The pressure-driven separation process of claim 15, wherein said filler is a zeolite.

24. (new) The pressure-driven separation process of claim 15, wherein said filler is a zeolite having a ZSM-5 structure.

25. (new) The pressure-driven separation process of claim 15, wherein said filler is a zeolite having a USY structure.

26. (new) The pressure-driven separation process of claim 15, wherein said elastomer is a polysiloxane.

27. (new) The pressure-driven separation process of claim 15, wherein said elastomer is a polydimethylsiloxane.

28. (new) The pressure-driven separation process of claim 15, wherein said elastomer is EPDM.